traception is, in my view, too stringent a proscription. Similarly, the suggestion that a history of acute liver disease should preclude use of the pill may be overly stringent. However, a history of cholestatic liver disease is a definite contraindication to their use.

The use of oral contraception in the face of hypertension, diabetes or a strong family history of diabetes, remains a matter of judgment. The need for 100 percent contraception must be balanced against the risk. Frequent monitoring of glucose tolerance and blood pressure are necessary.

In women with strong family histories of coronary artery disease, it would be wise to obtain results of serum triglyceride, cholesterol and chylomicron tests before starting oral contraception and periodically during pill therapy. The symposium suggests that this be done in all patients regardless of familial history.

When prescribing the pill, the physician should alert the woman to symptoms suggestive of important side effects. These would include leg pain, swelling, redness, changes in visual acuity and persistent headaches. As with the others, the latter symptom is of great concern. There appears to be an association between oral contraceptives and lesions in the vertebrobasilar posterial cerebral arterial system.<sup>3</sup> Cerebral thrombosis occurring during pill usage is often preceded by migraine type headaches. Their presence suggests a need for switching to another pill for a brief trial or discontinuing hormonal contraception altogether.

Women taking oral contraceptives should be seen every six months for an interview, urine analysis and a blood pressure determination. Breast and pelvic examination with a Papanicolaou smear should be done yearly in the asymptomatic woman who has no significant history of disease and no significant family history of disease. The need for routine blood sugar, triglyceride and cholesterol testing in each of the 8 million women taking the pill in the United States is still to be determined.

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## Health, Well-Being, Biological Systems and Fthics

THE GROWING INTERDEPENDENCE of almost every aspect of human society in the modern world is a fact of life with which we have yet to learn to cope effectively at any level of social organization or government. The evidence of this is everywhere about us. Both nationwide and worldwide are the rising expectations and social demands of the have-nots which no one seems to know how to meet. The economic system is producing a potentially devastating nationwide and worldwide inflation, and there is no agreement even among economists as to what can be done to correct or control it. And the political efforts to solve these and other problems of health and wellbeing for any nation, not to mention mankind as a whole, have generally been relatively ineffective and often have worsened the problems they sought to correct. The scholarly disciplines of sociology, economics and political science have so far failed to come up with adequate answers, and it seems quite evident that they are not yet sufficiently developed as professional disciplines to be of much real help.

It is suggested that many of the assumptions of the social sciences and consequently the findings upon which actions are based in both the public and private sectors may not be soundly based and that this may be because the true significance of the underlying biological nature of human life and human behavior in the earth's closed ecosystem has not yet been fully appreciated in these disciplines. The facts are that life on earth—including human life—finds itself part of a closed biosphere and thus subject to the laws of biological systems. Humans themselves are by their nature biological systems and, like all forms of life, their biological nature governs their behavior as individuals, their relationships to one another and their adaptation or lack of it to the environment in which they find themselves. Perhaps what is needed now is recognition of the biological nature of mankind and the probably biological nature of man's problems and development of a more biological base or framework for the social and behavioral sciences.

In any case the realities of the interaction of the closed biosphere with the human population on earth are becoming increasingly evident for all to see. For the first time in human history technologic progress has made it possible for the world population to increase enough to make the pinch of the closed biosphere felt in terms such as finite food and energy resources and an unhealthy technological pollution of the land, sea and air environment. In a very real sense the social, economic, political and legislative problems engendered by the effects of modern technologic progress—and inadequately dealt with by sociology, economics and political science at present—can be viewed as biological problems and studied within a biological framework. It seems reasonable to assume that just as human nature and human behavior are fundamentally biological, so are the social, economic and political systems of mankind. It is suggested that if this can be recognized and accepted it begins to be possible to think of the problems of mankind on earth in different terms. In such a context as this, health and wellbeing take on new meaning and the principle of adaptation of man and his environment for health and well-being takes on new dimensions. Man has developed considerable capability to influence his environment both favorably and unfavorably, and he has a considerably lesser—but still significant-capability to influence his own nature and behavior both individually and as a species. Both should be improved, but it is the latter capability which now sorely needs strengthening. This will almost certainly require new and more soundly biologically-based approaches within the social and behavioral sciences.

But still more will be necessary. Human behavior in adapting to the problems of the closed earth biosphere cannot be separated from ethics, from some consideration of what is right and what is wrong. There is no provision in natural law for right or wrong. If health and well-being, and improving something called the quality of life are to be accepted as principal goals of mankind on earth, then it may be possible, even necessary, to construct an ethic of right and wrong around these goals and do this within the framework of the natural law within which mankind must function within the earth ecosystem.

There is much to be done. It is important to note that health care is at the interface of health

and well-being, or the lack of it, in any society. It is in health care that many of the unsolved problems of such a biological society as has been discussed come into the sharpest focus. If there is to be a better understanding of these problems and if better solutions are to be found, sophisticated input will be needed from both medicine and society—an input which neither is yet prepared to give.

---MSMW

## Sjögren's Syndrome

In 1933, Henrik Sjögren, a Swedish ophthalmologist, published a classic monograph detailing observations on keratoconjunctivitis sicca, a condition characterized by dryness of the eyes. Sjögren's study clearly established that the ocular findings of this disorder were but a local manifestation of a more generalized disease process in which arthritis, anemia and other systemic features were present. The disease also included decreased secretion of the salivary glands and of the mucosal glands of the mouth and upper respiratory tract, and parotid enlargement. Subsequently termed Sjögren's syndrome, the condition is now recognized as a multisystem disorder intimately related to the various connective tissue diseases.

As indicated by Talal in the Medical Staff Conference on Sjögren's syndrome appearing elsewhere in this issue, the disease is by no means rare; indeed, it is the second most frequent collagen disorder, surpassed in prevalence only by rheumatoid arthritis. The diagnosis is, however, frequently overlooked. Whaley et al<sup>1</sup> recently observed that Sjögren's syndrome had been unsuspected before referral in all of 94 patients in whom it coexisted with rheumatoid arthritis, who were seen in a diagnostic center in Glasgow. Most of the referrals had been made by consultants, physicians who should probably have been conversant with the disorder.

Although an occasional person may be asymptomatic in spite of significant abnormalities of lacrimal and salivary glands, most persons with Sjögren's syndrome complain of discomfort and dryness of the eyes and mouth, and many note